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2 IN THE CLAIMS

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2 1. (Cancelled)

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2 2. (Currently Amended) The method of claim 1 wherein the
3 programmable at least a portion of the PLD chip is partitioned into a plurality of rows and
4 columns of logic array blocks (LABs).

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2 3. (Currently Amended) The method of claim 1 A method of verifying a
3 full-chip electronic design of a programmable logic device (PLD) chip, the method comprising:
4 partitioning the PLD chip into a plurality of blocks;
5 generating a block level RTL model of one of the plurality of blocks, wherein generating
6 a block level RTL comprises:

7 creating a block level schematic of an electronic design;

8 extracting a block Ram Bit Address(RBA) file from the block level schematic;

9 extracting a block level CRAM array from the block level RBA file; and

10 generating the block level RTL using the block level CRAM array;

11 generating a block level functional representation of the one of the plurality of blocks;

12 producing a full chip RTL model using the block level RTL model and the block level

13 functional representation; and

14 using the full chip RTL model for verification, simulation or debugging.

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2 4. (Original) The method of claim 3 wherein the block level CRAM array
3 comprises absolute coordinates and RAM bit values for each CRAM bit.

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2 5. (Currently Amended) The method of claim 4 wherein the CRAM
3 iscomprises at least one of EPROM, EEPROM, fuse, anti-fuse, SRAM, MRAM, FRAM, or
4 DRAM.

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2 6. (Currently Amended) The method of claim 1 A method of verifying a
3 full-chip electronic design of a programmable logic device (PLD) chip, the method comprising:
4 partitioning the PLD chip into a plurality of blocks;
5 generating a block level RTL model of one of the plurality of blocks, wherein generating
6 a block level RTL comprises:

creating a block level schematic of an electronic design; generating a full chip schematic using a plurality of the block level schematics; producing a full chip RBA file from the full chip schematic; extracting block level RBA file from the full chip RBA file; extracting a block level CRAM array from the block level RBA file; and generating a block level RTL model using the block level CRAM array; generating a block level functional representation of the one of the plurality of blocks; producing a full chip RTL model using the block level RTL model and the block level functional representation; and using the full chip RTL model for verification, simulation or debugging.

7. (Original) The method of claim 6 wherein the block level CRAM array comprises absolute coordinates and RAM bit values for each CRAM bit.

8. (Currently Amended) The method of claim 7 wherein the CRAM iscomprises at least one of EPROM, EEPROM, fuse, anti-fuse, SRAM, MRAM, FRAM, or DRAM.

9. (Currently Amended) The method of claim 13 further including:
comparing the block level RTL model to the block level schematic before producing a
full chip RTL model; and
modifying the block level functional representation and the block level CRAM array if
the block level RTL is not equivalent to the block level schematic.

10. (Currently Amended) The method of claim 43 wherein the PLD is a complex programmable logic device ("CPLD"), programmable array logic ("PAL"), programmable logic arrays ("PLA"), field PLA ("FPLA"), erasable PLDs ("EPLD"), electrically erasable PLD ("EEPLD"), logic cell arrays ("LCA") or field programmable gate arrays ("FPGA").

11. (Currently Amended) The method of claim 43 wherein the programmable logic device is embedded into another an electronic device.

2 12. (Currently Amended) The method of claim 121 wherein the ~~other~~
3 electronic device comprises programmable and non-programmable circuitry.

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2 13. (Original) The method of claim 2 wherein the LAB comprises a plurality
3 of one or more of the following sub-blocks: LE, LIM, LAB wide, LEIM, CRAM and DIM.

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2 14. (Currently Amended) The method of claim 13 wherein one or more of
3 the plurality of blocks ~~arecomprise~~ digital signal processing blocks, input/output blocks, or
4 memory blocks,~~etc.~~

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2 15. (Currently Amended) A data processing system for verifying a full-chip
3 electronic design of a programmable logic device (PLD) chip, the data processing system
4 including instructions for implementing the method of claim 13.

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6 16. (Currently Amended) A method of verifying a programmable region of
7 an electronic design, the method comprising:

8 partitioning the programmable region into a plurality of blocks;
9 generating a block level RTL model of one of the plurality of blocks wherein generating
10 a block level RTL comprises:

11 creating a block level schematic of an electronic design;
12 extracting a block Ram Bit Address(RBA) file from the block level schematic;
13 extracting a block level CRAM array from the block level RBA file; and
14 generating the block level RTL using the block level CRAM array;
15 generating a block level functional representation of the one of the plurality of blocks;
16 producing a full region RTL model from the block level RTL model and the block level
17 functional representation; and
18 using the full region RTL model for verification, simulation or debugging.